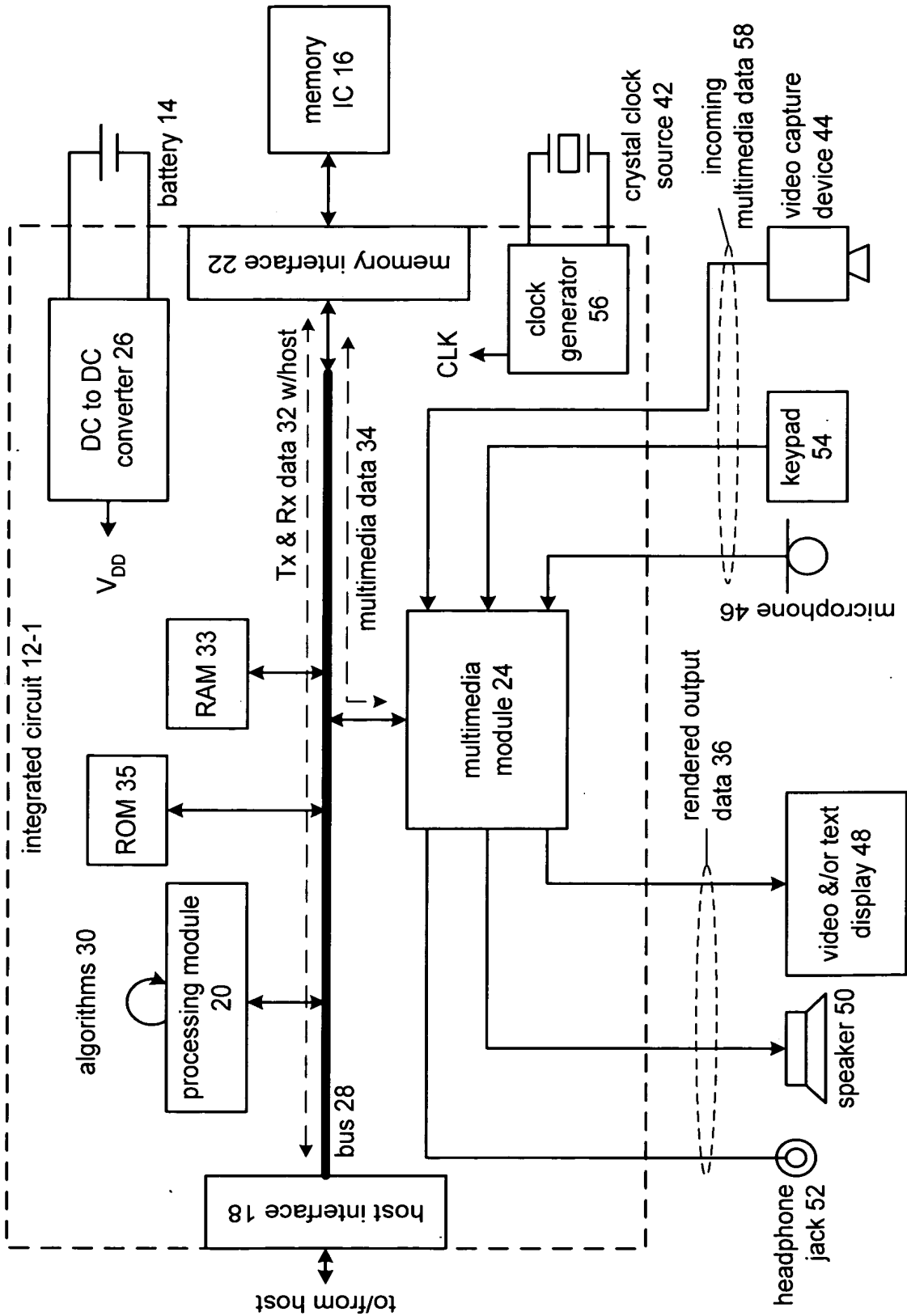
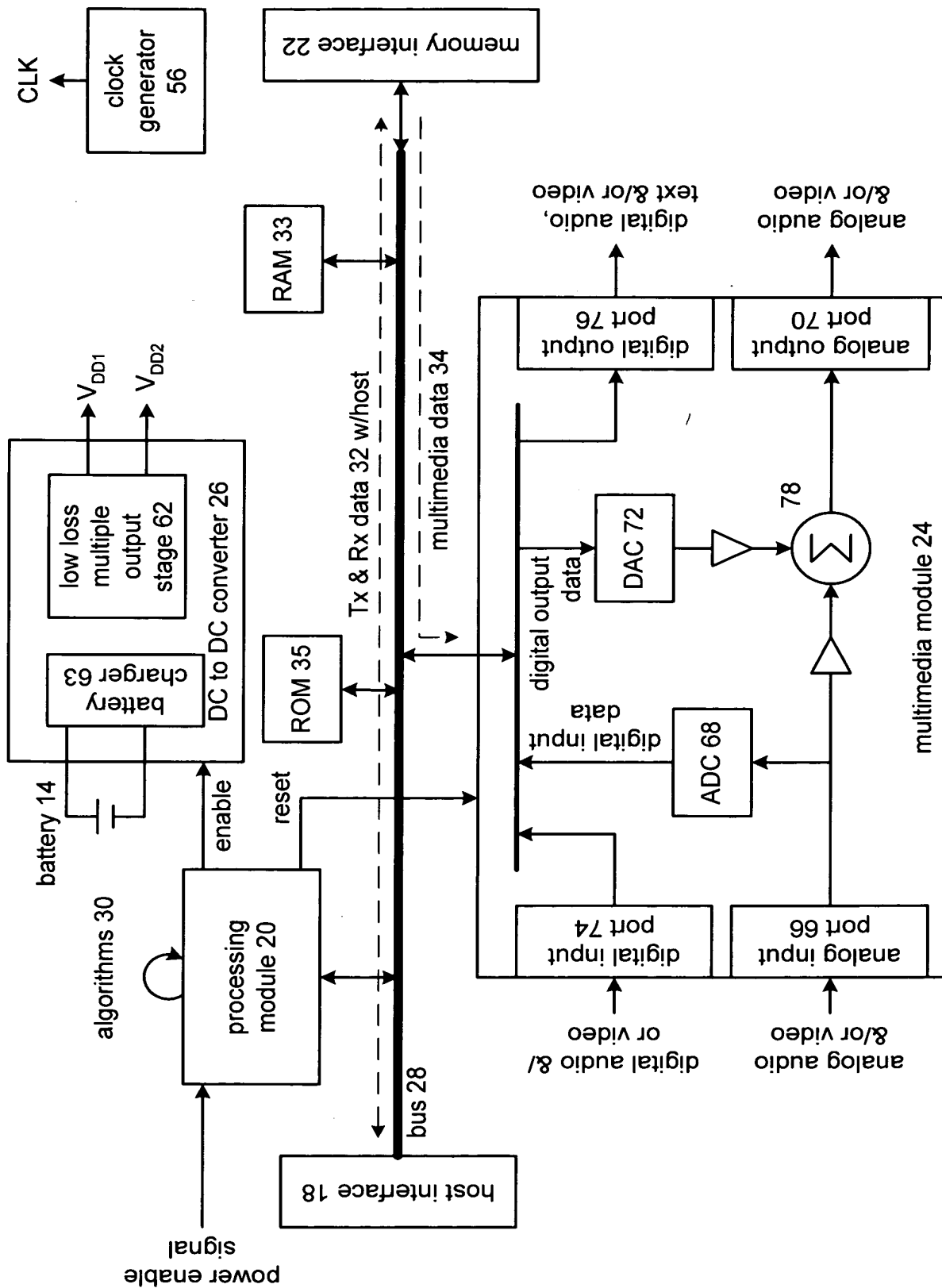


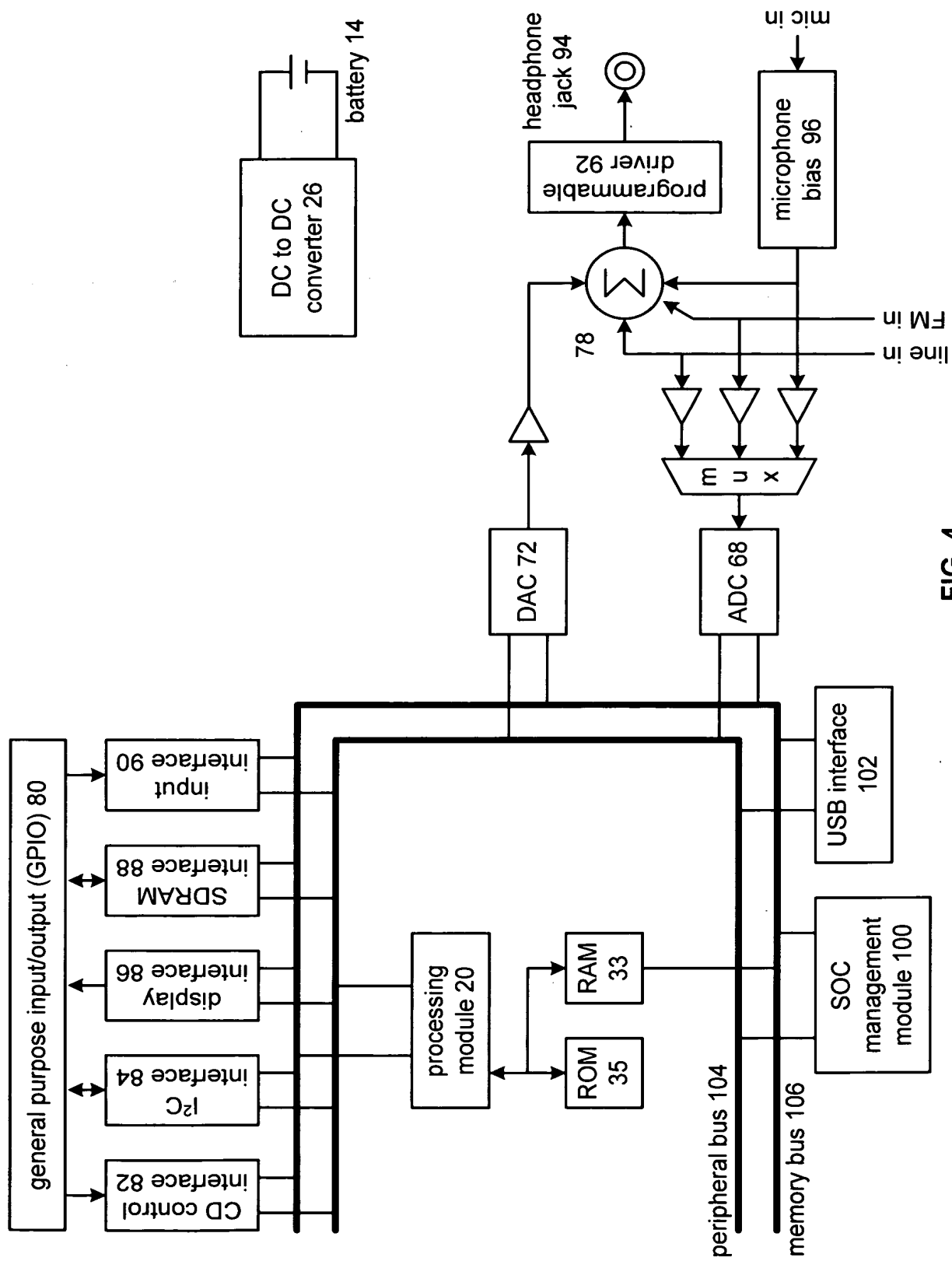
**FIG. 1**



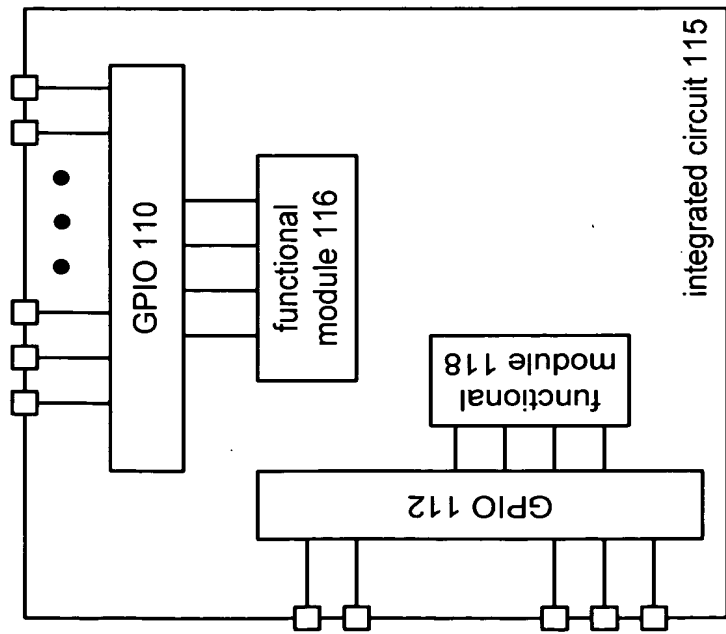
**FIG. 2**  
multi-function handheld device 40



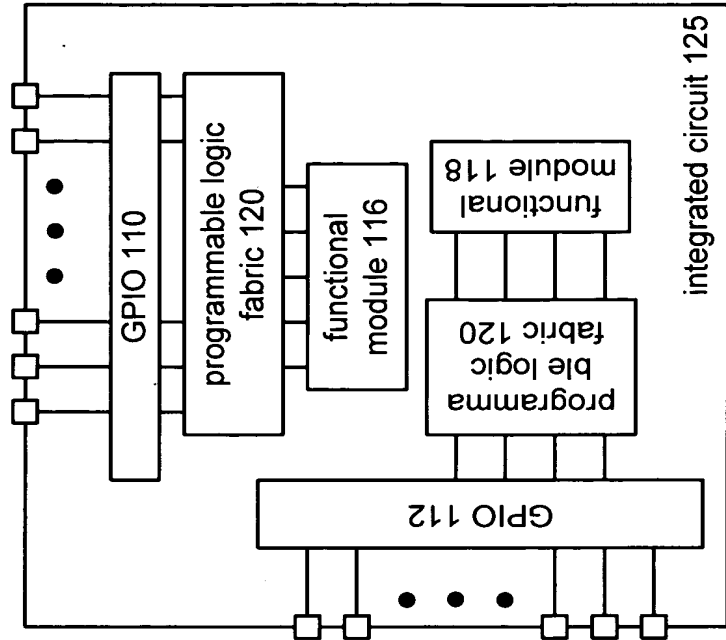
**FIG. 3**  
integrated circuit 12-2



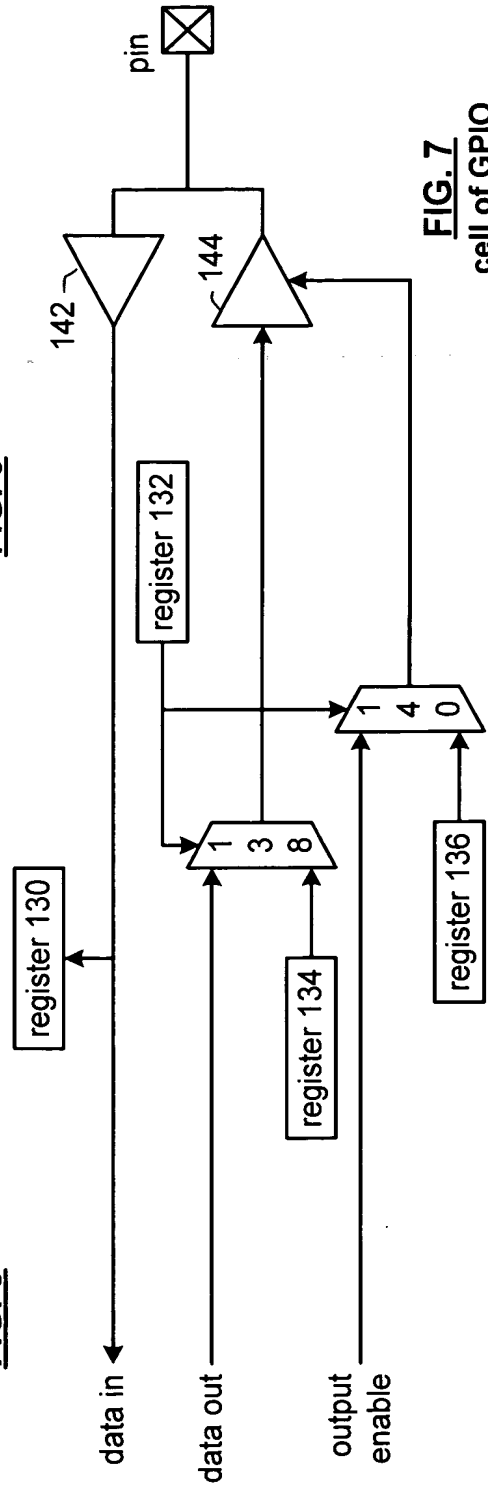
**FIG. 4**  
integrated circuit 12-3



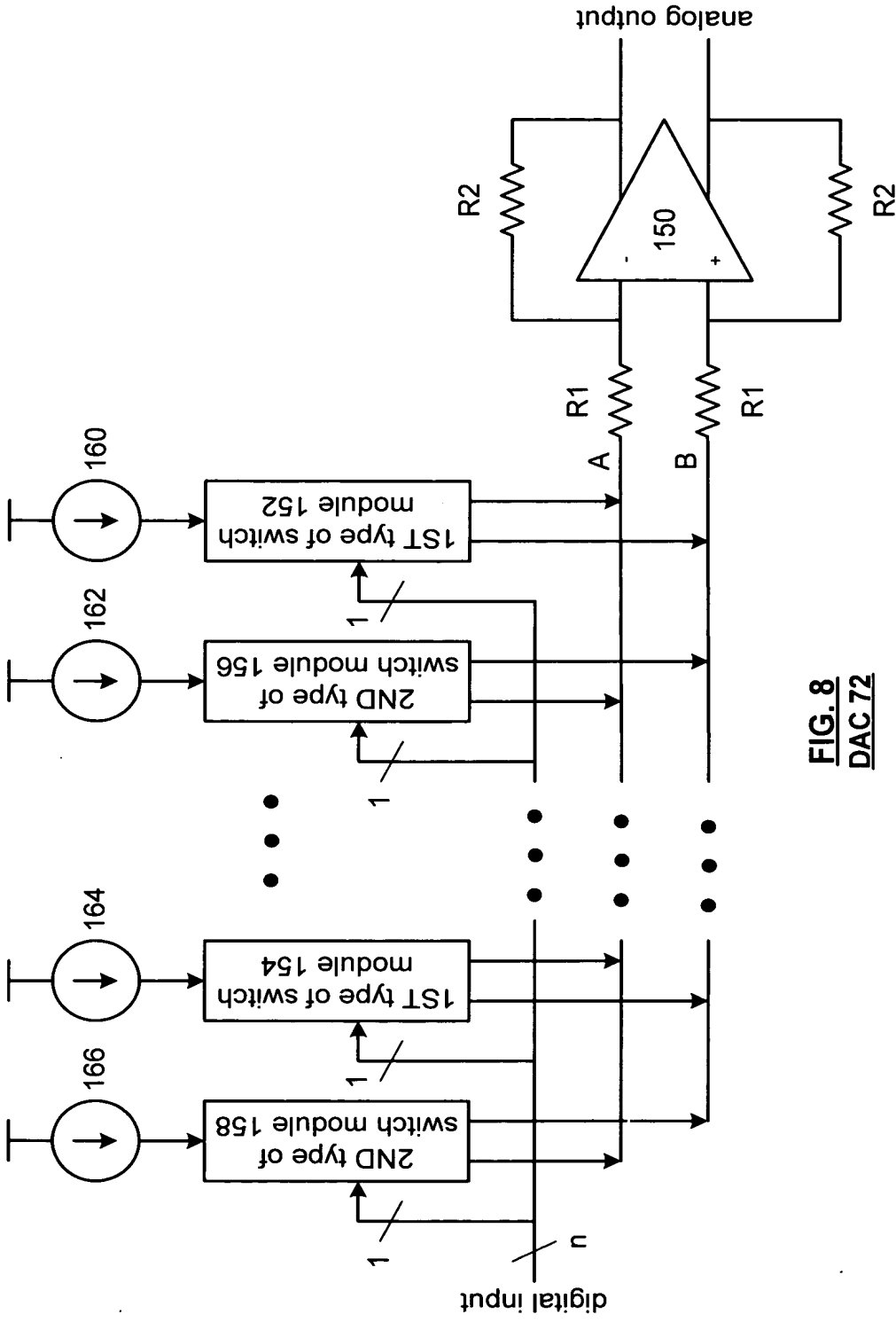
**FIG. 5**



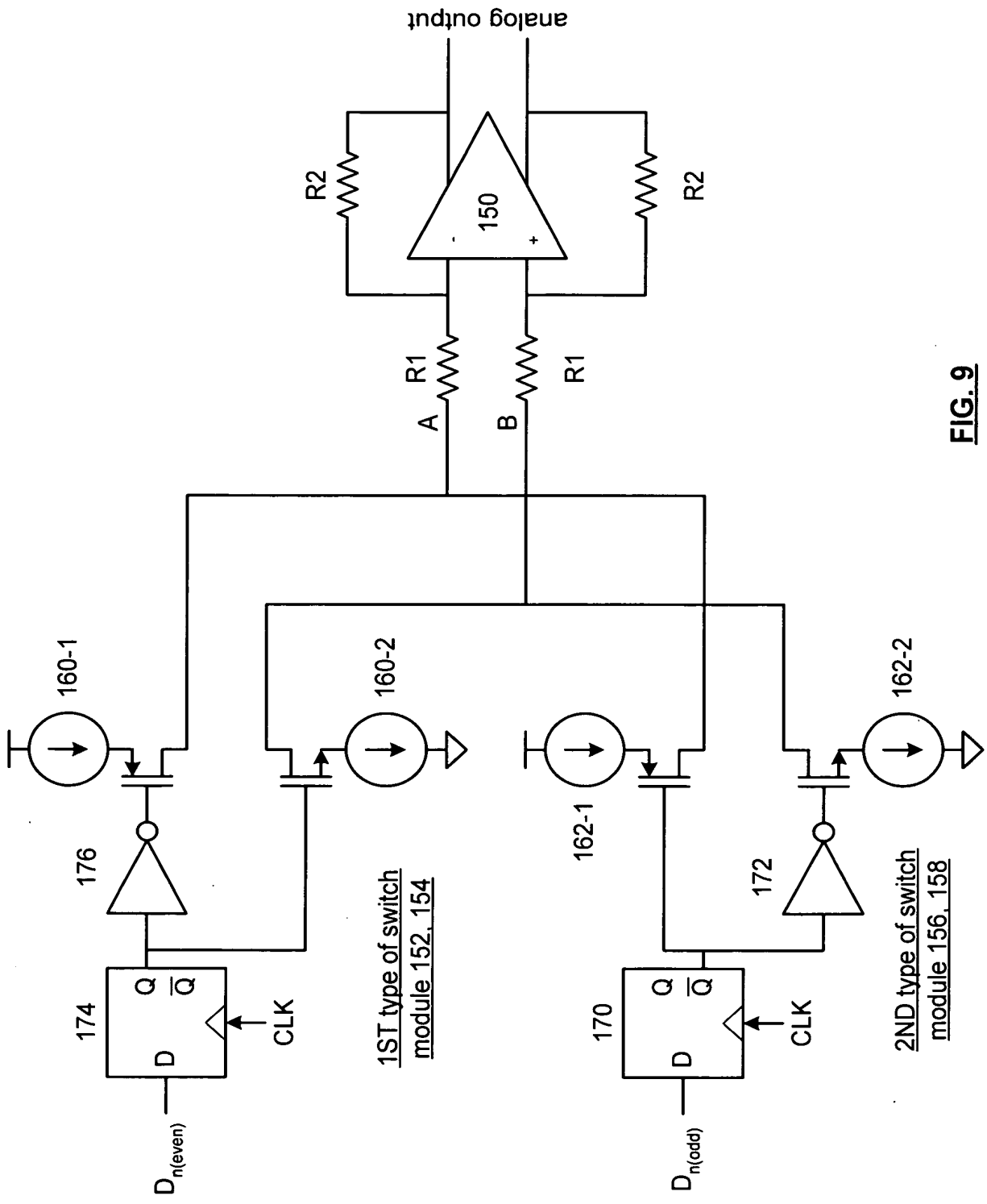
**FIG. 6**



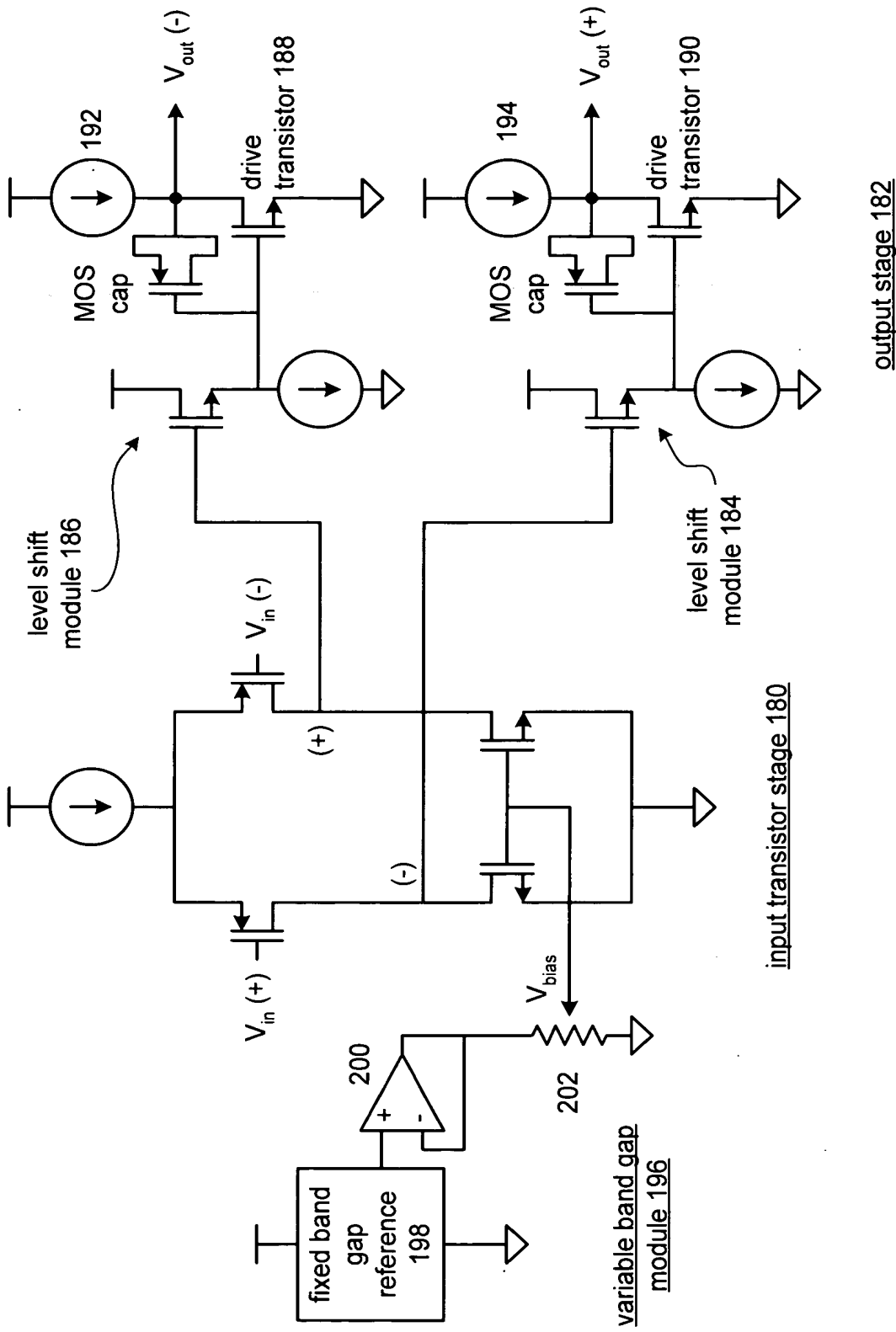
**FIG. 7**  
cell of GPIO



**FIG. 8**  
**DAC 72**

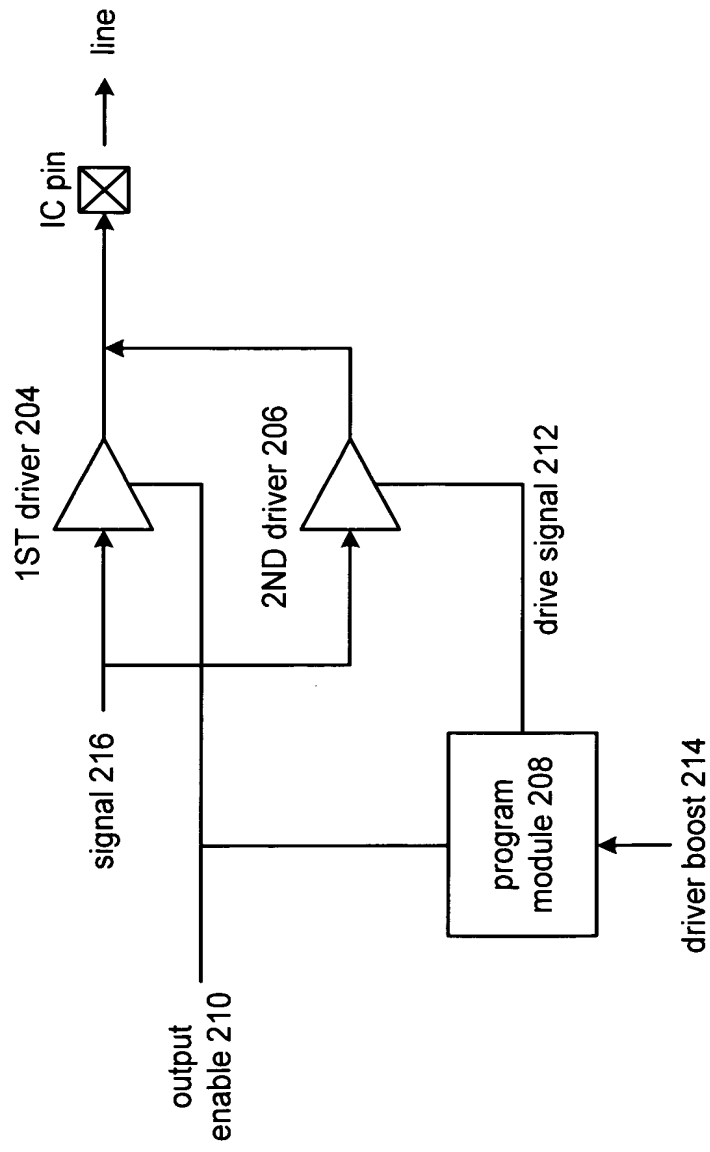


**FIG. 9**

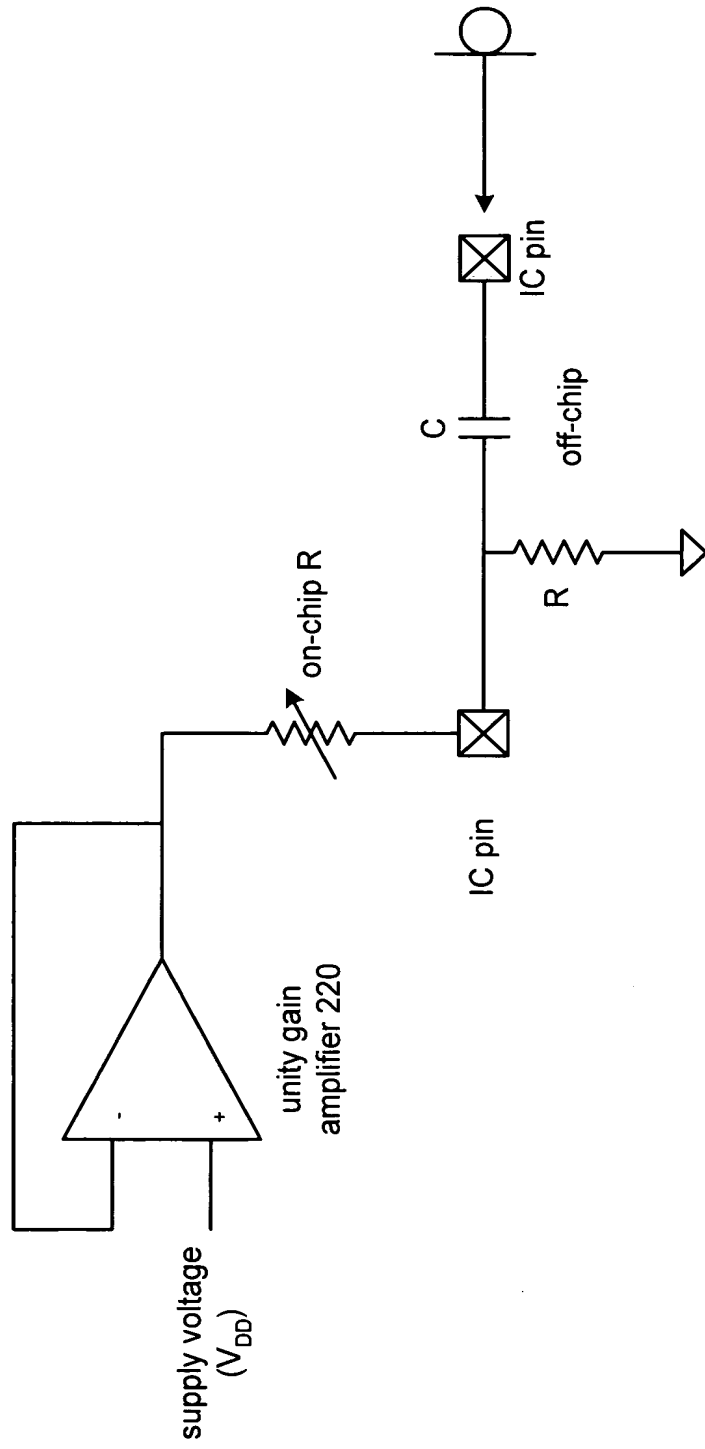


**FIG. 10**  
op amp 150

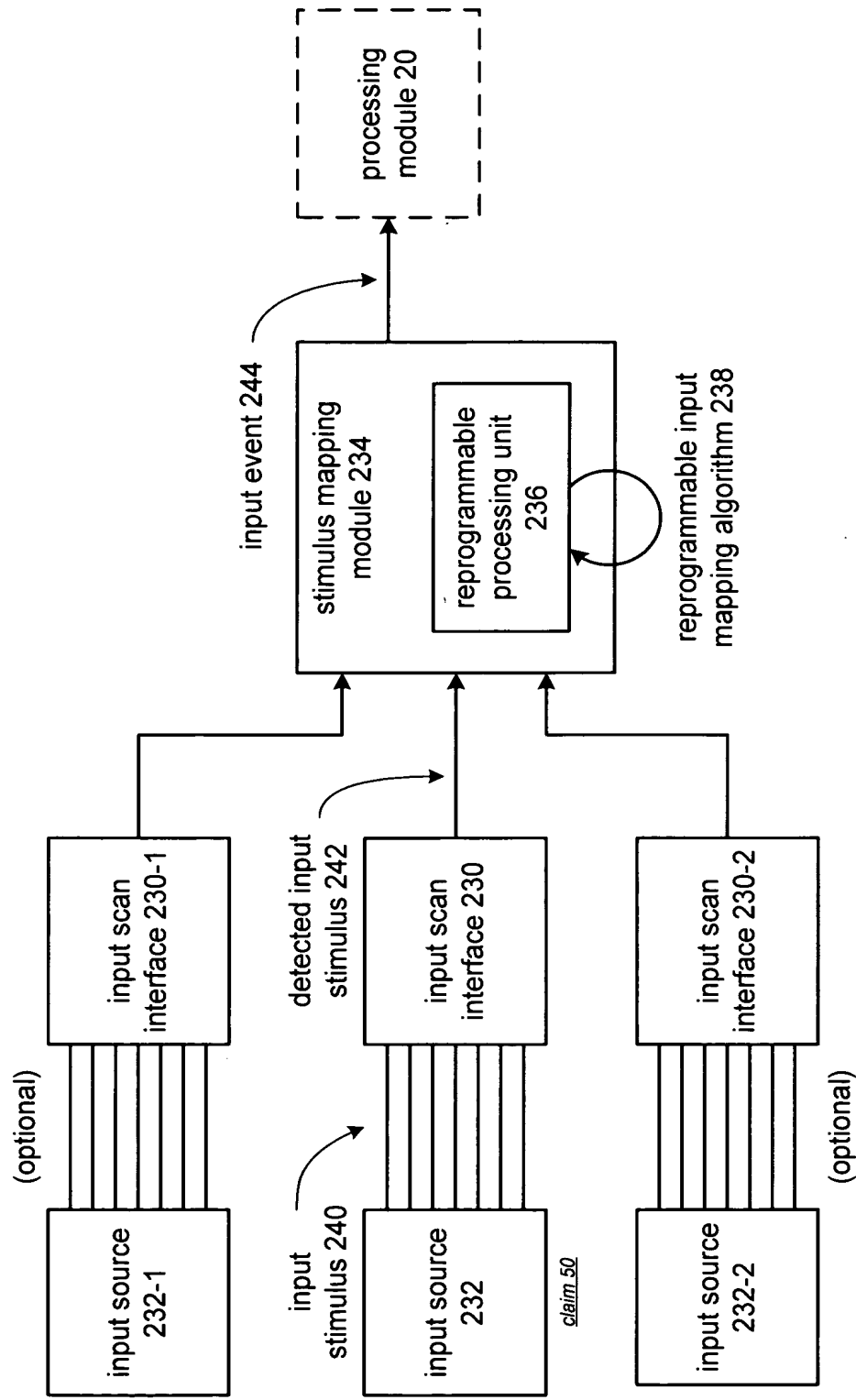




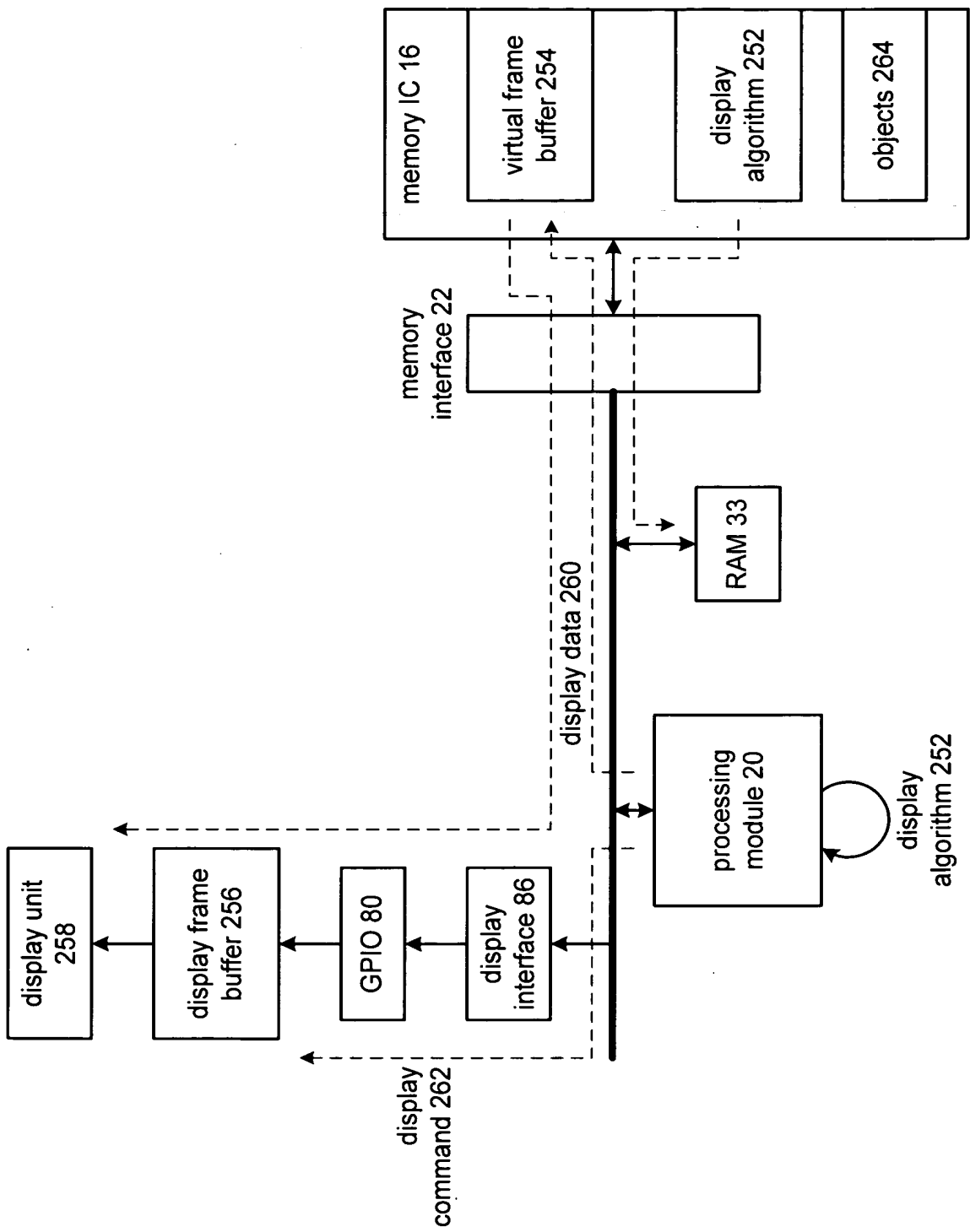
**FIG. 11**  
programmable driver 92



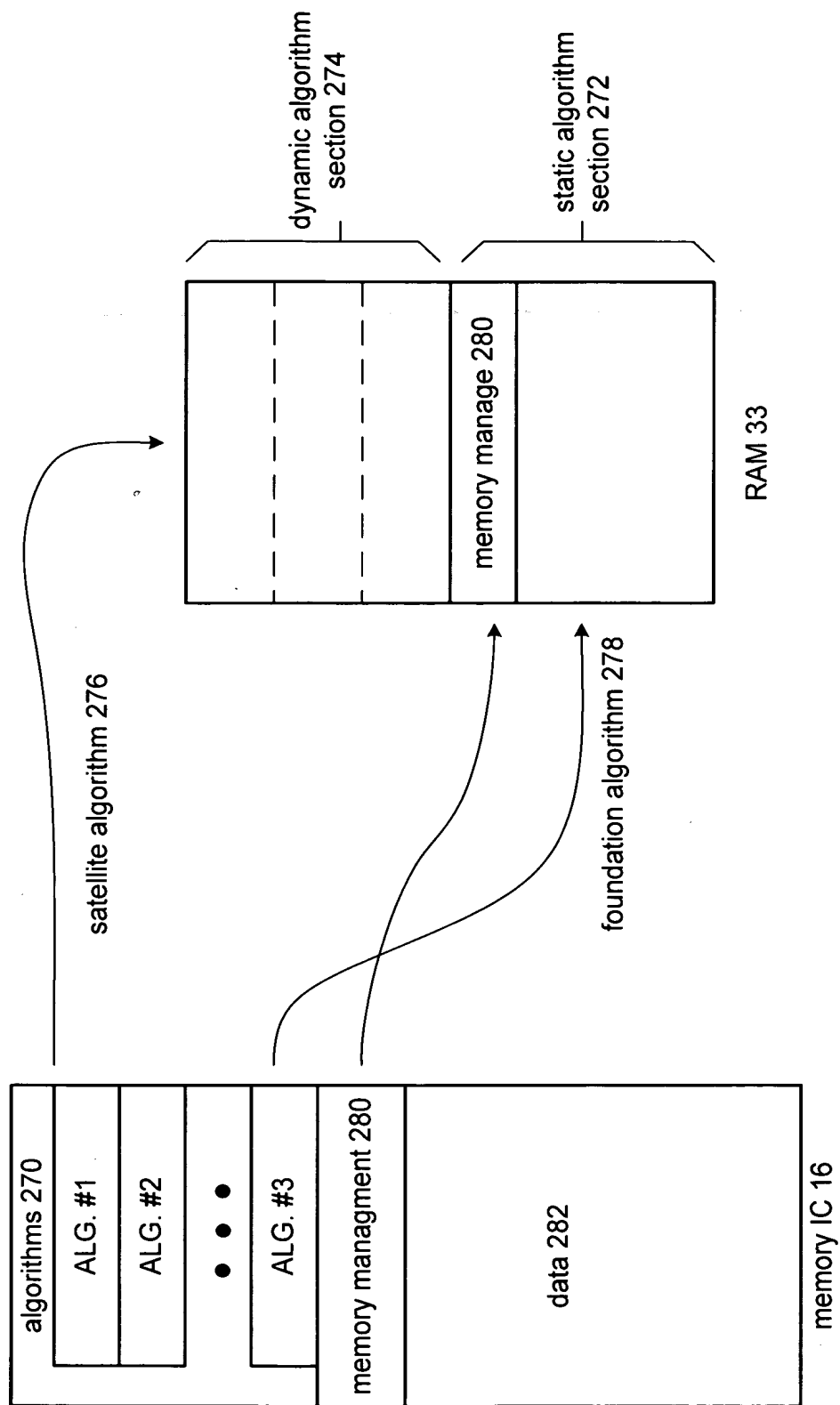
**FIG. 12**  
microphone bias 96



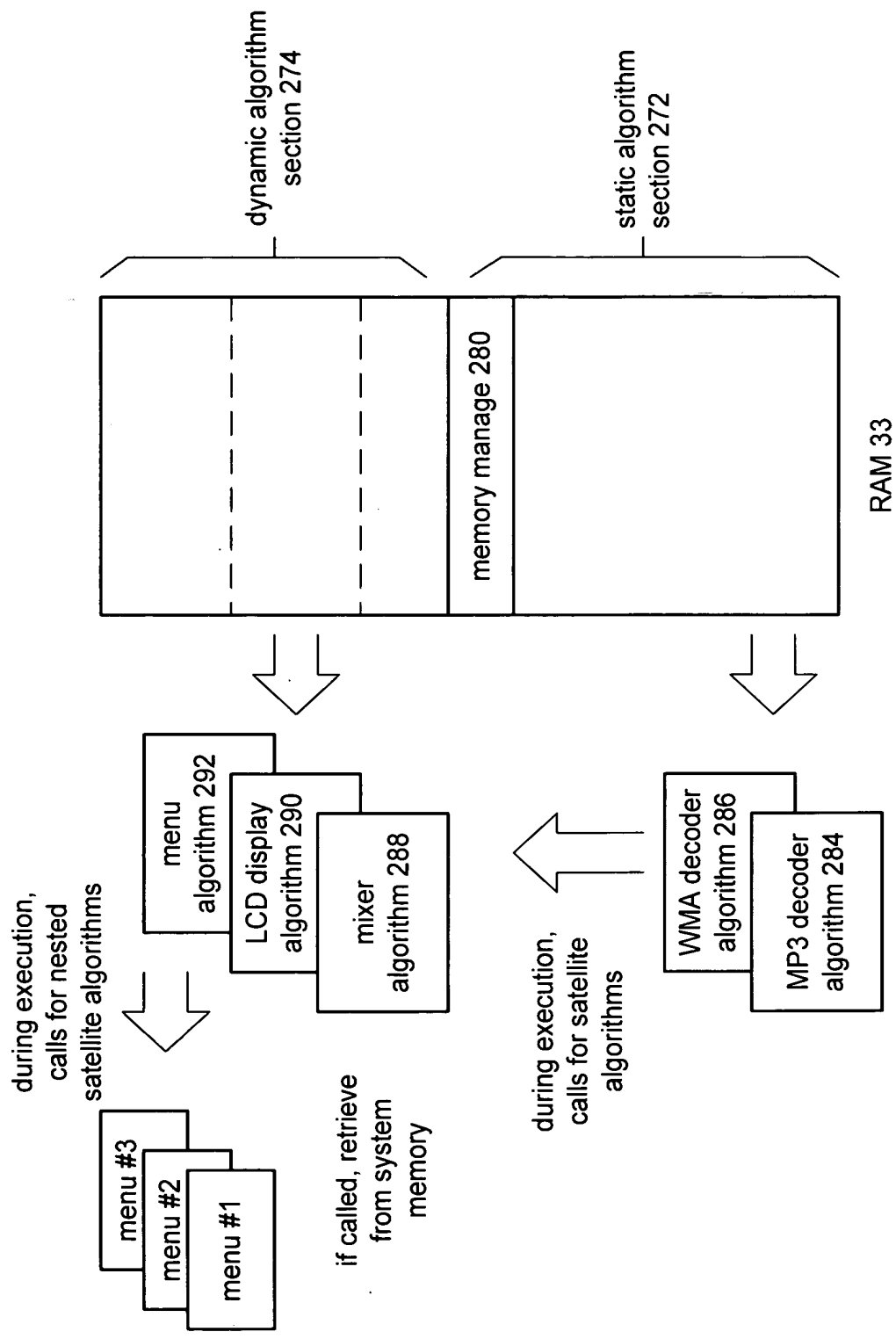
**FIG. 13**  
input interface 90



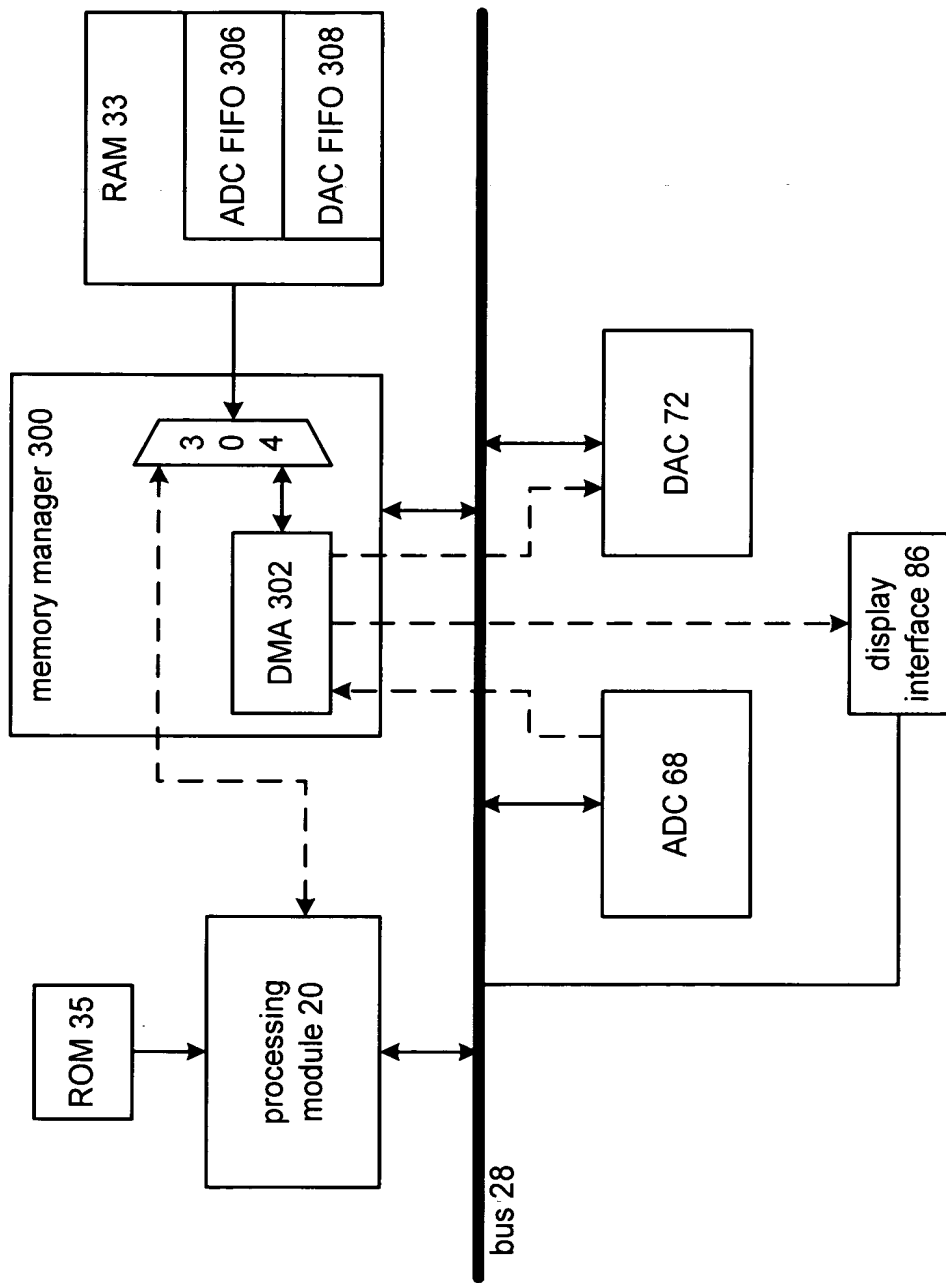
**FIG. 14**  
display interface system 250



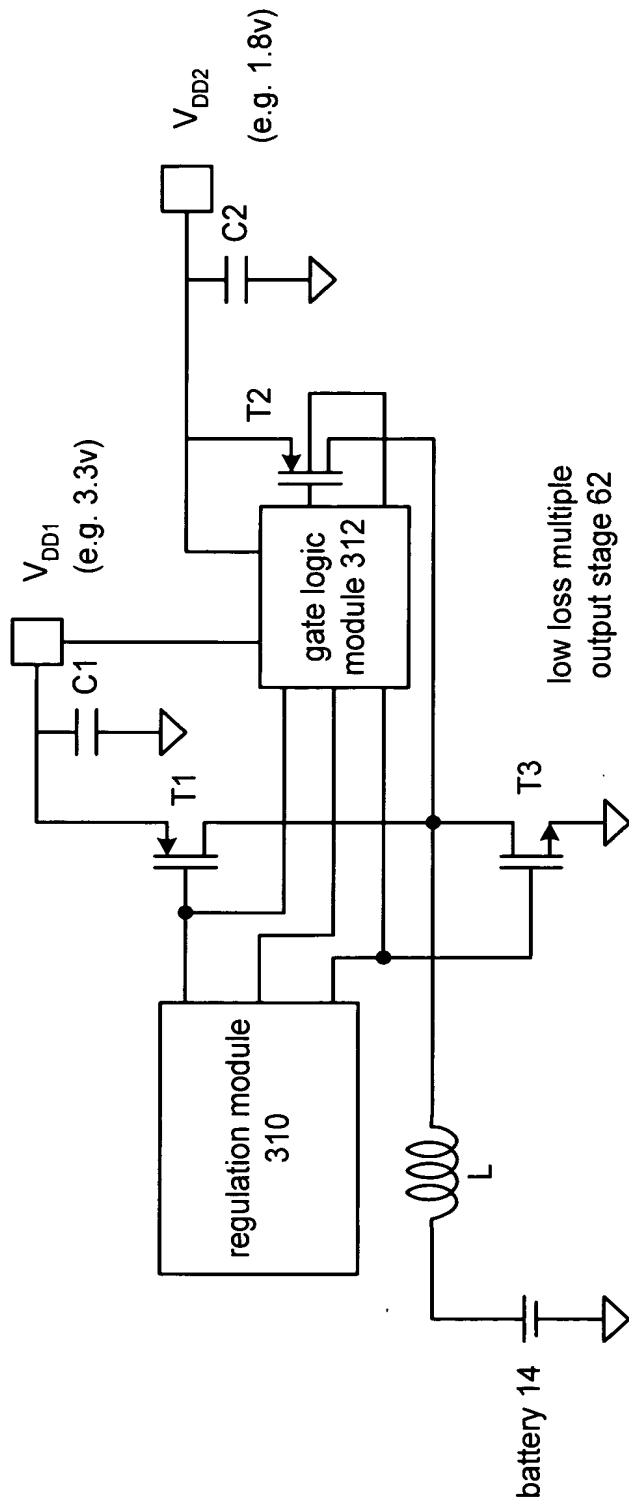
**FIG. 15**



**FIG. 16**



**FIG. 17**

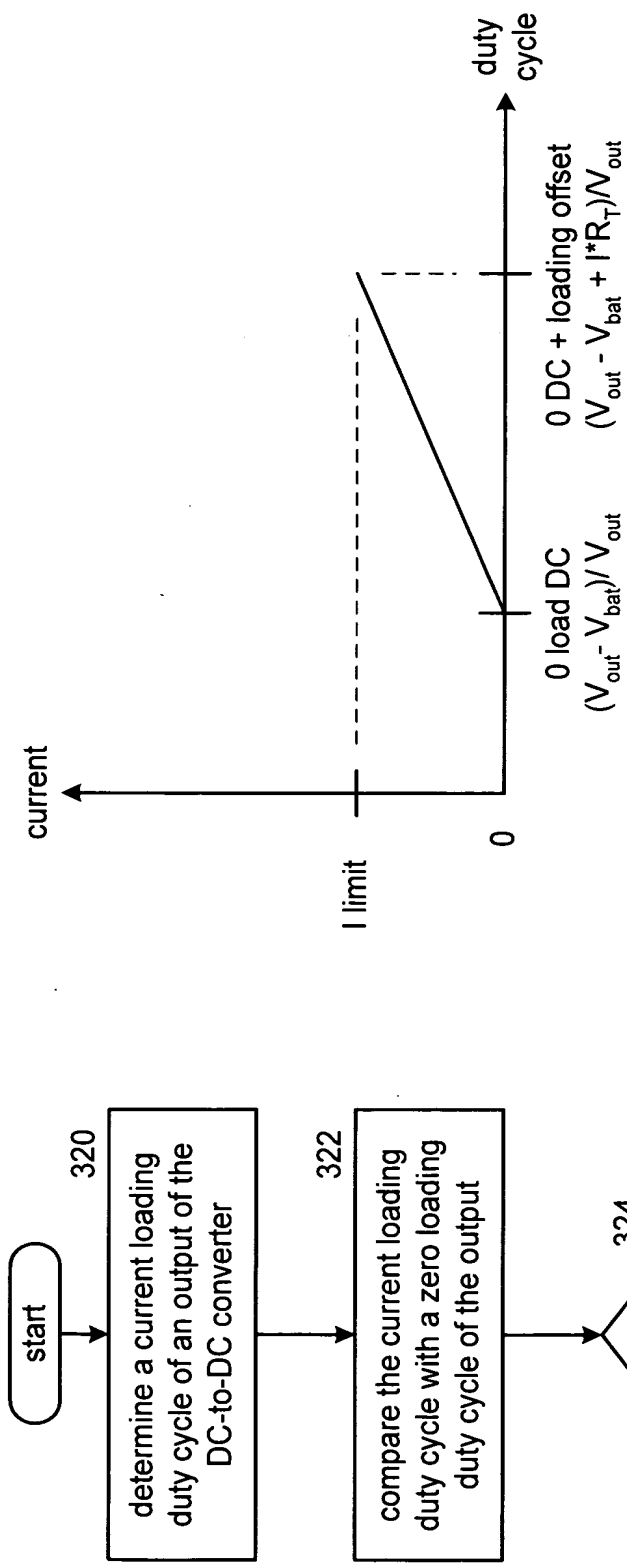


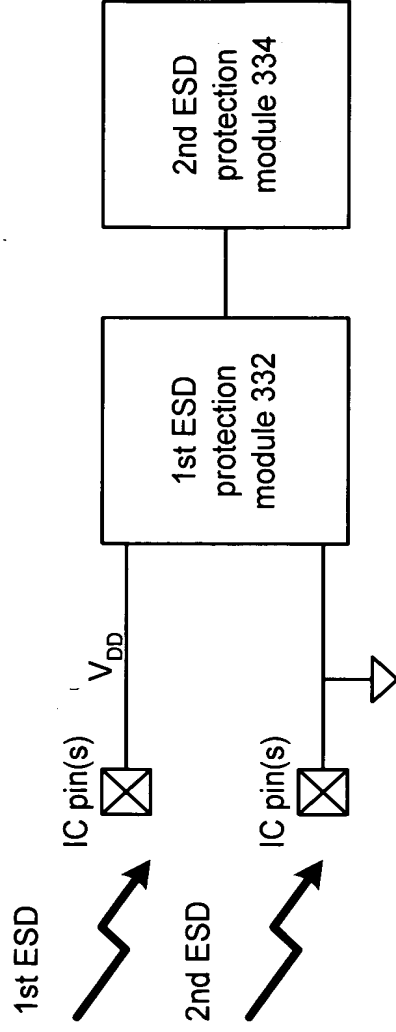
gate logic module function

if T1 is on, set gate and well voltage of T2 to  $V_{DD1}$ ;  
 if T1 is off and T3 is on, set gate and well voltage of T2 to  $V_{DD2}$ ;  
 if T1 is off and T2 is on, set gate and well voltage of T2 to 0v

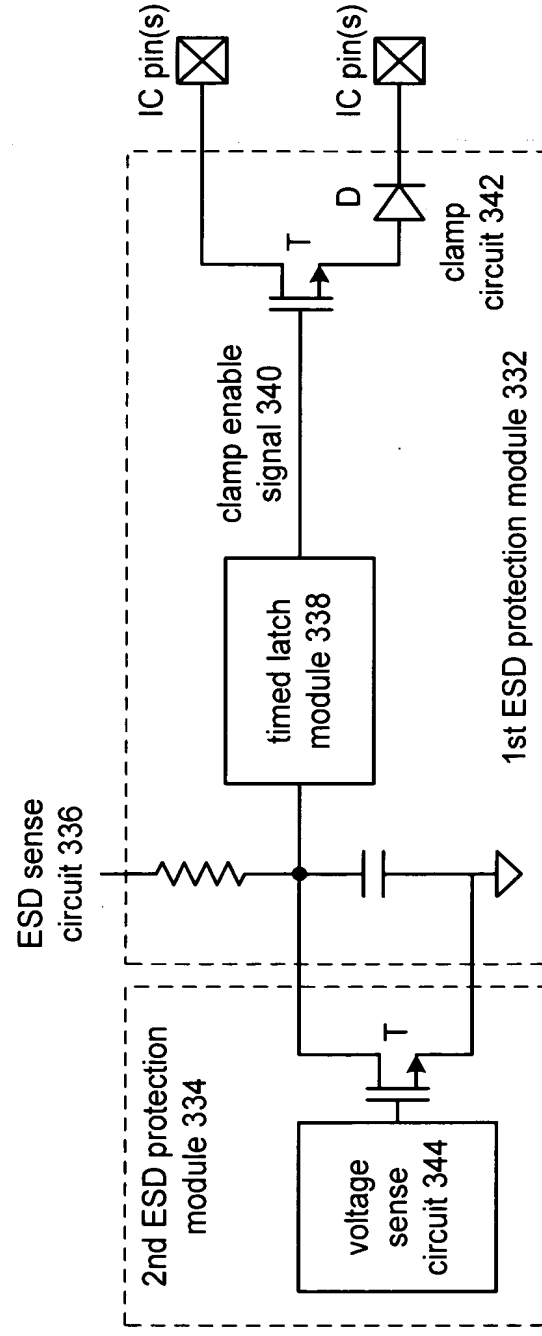
**FIG. 18**  
DC to DC converter 26



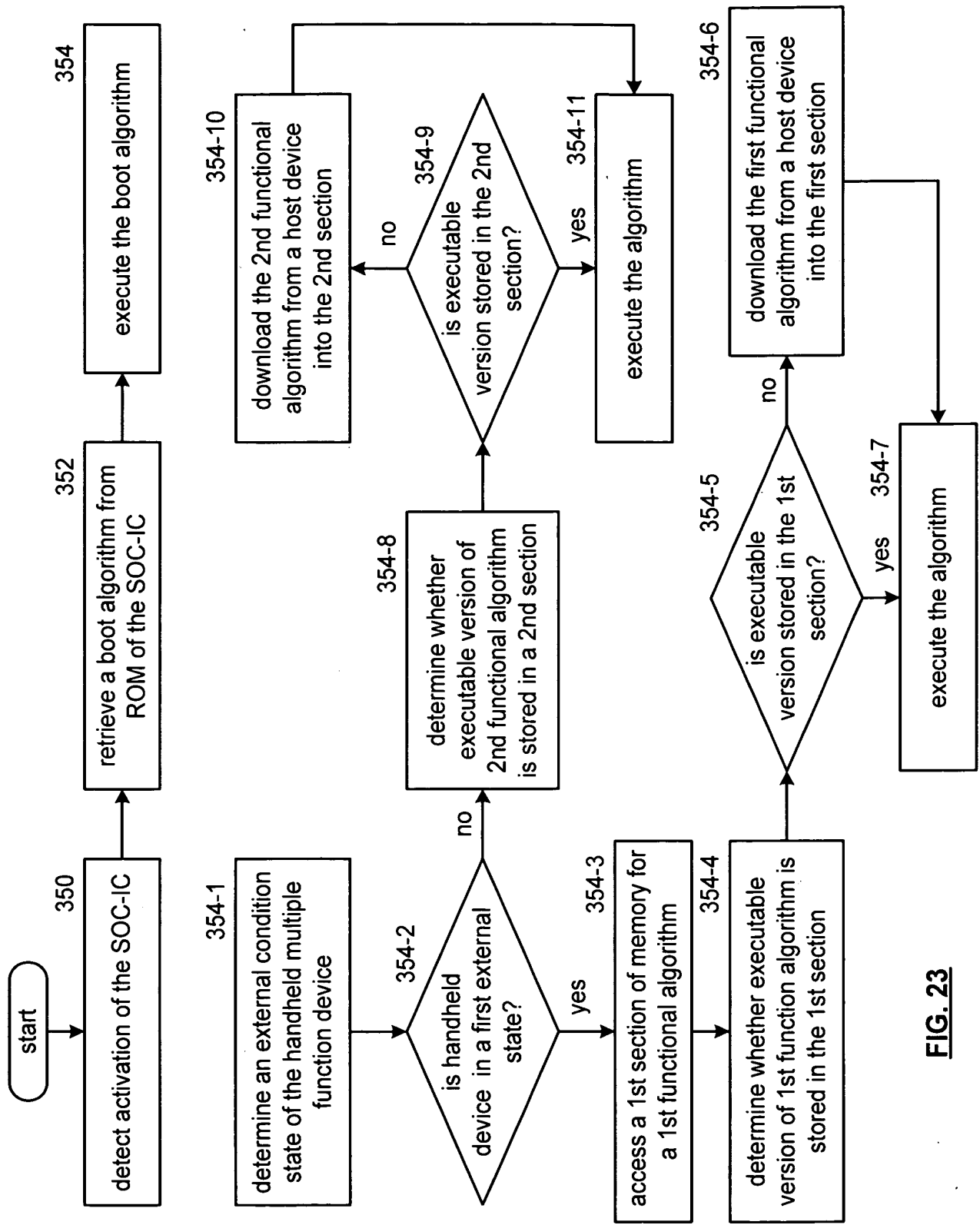




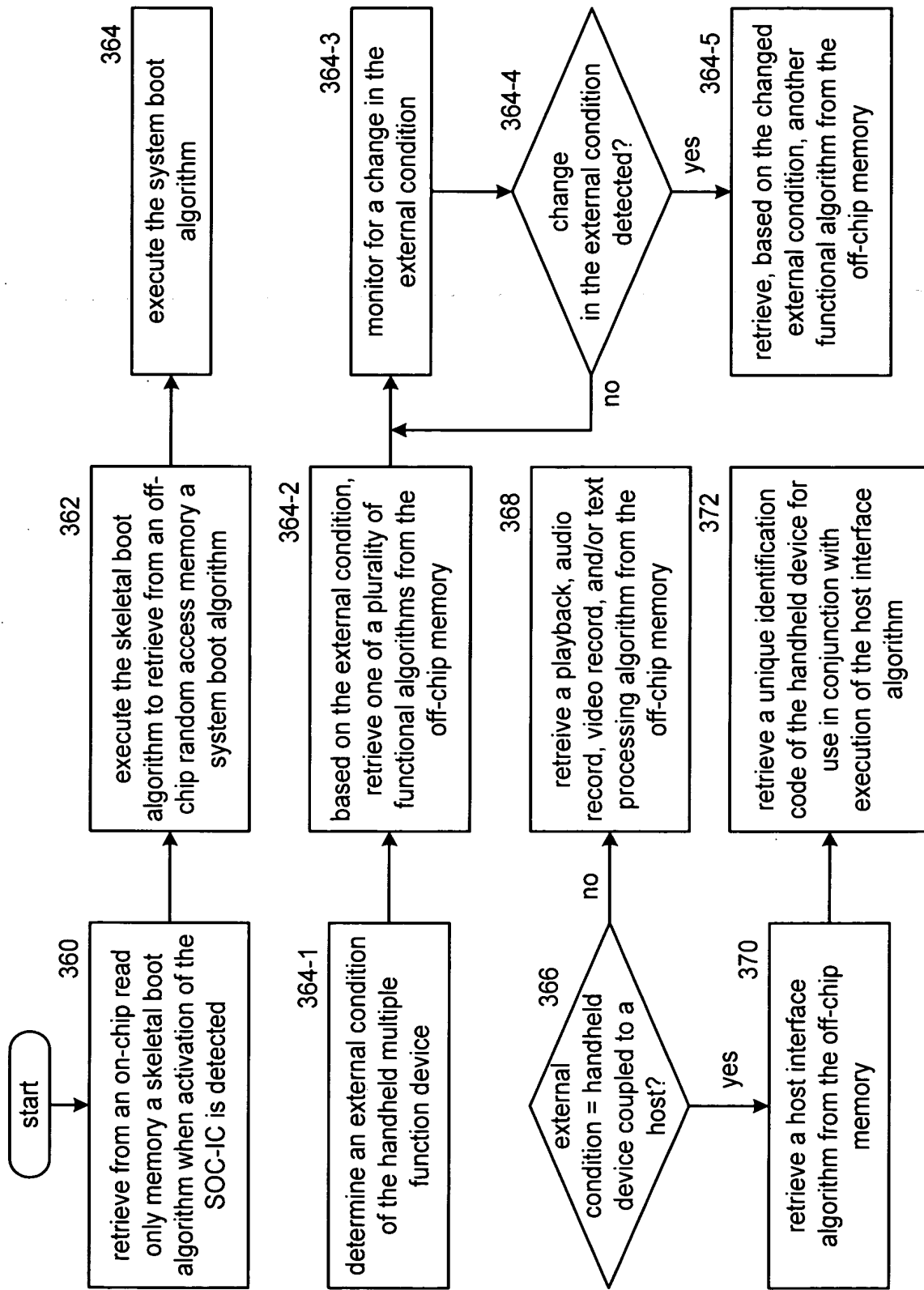
**FIG. 21**  
ESD protection circuit 330



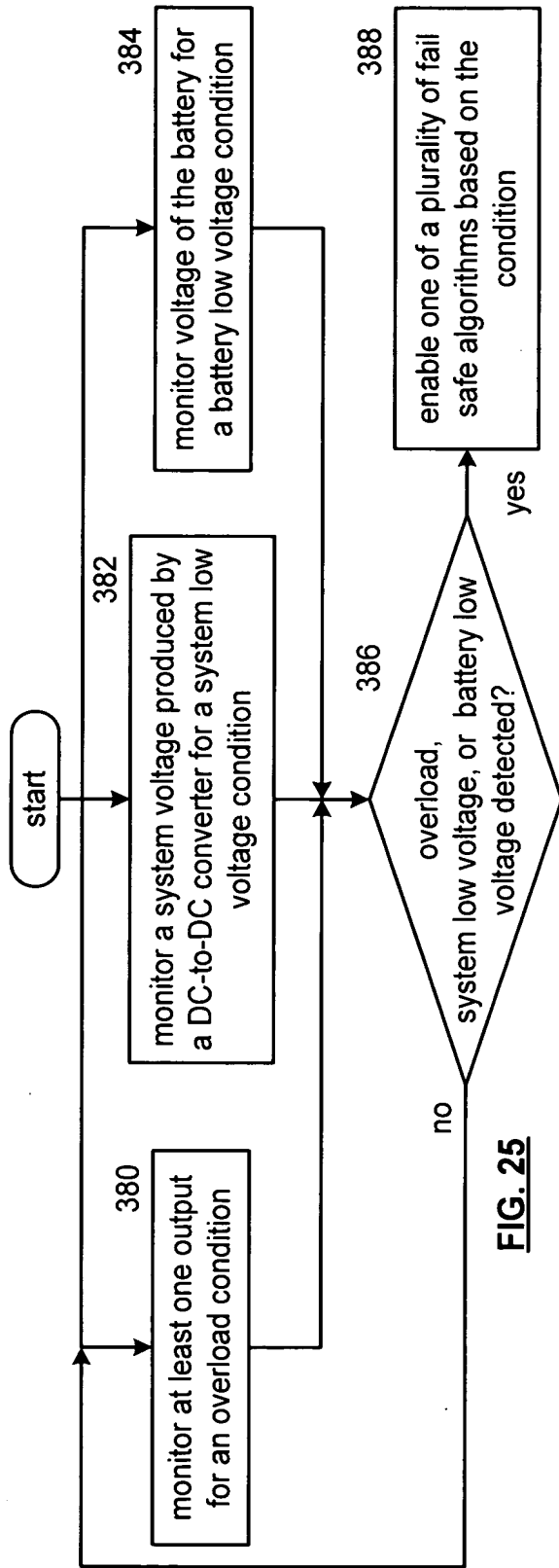
**FIG. 22**  
ESD protection circuit 335



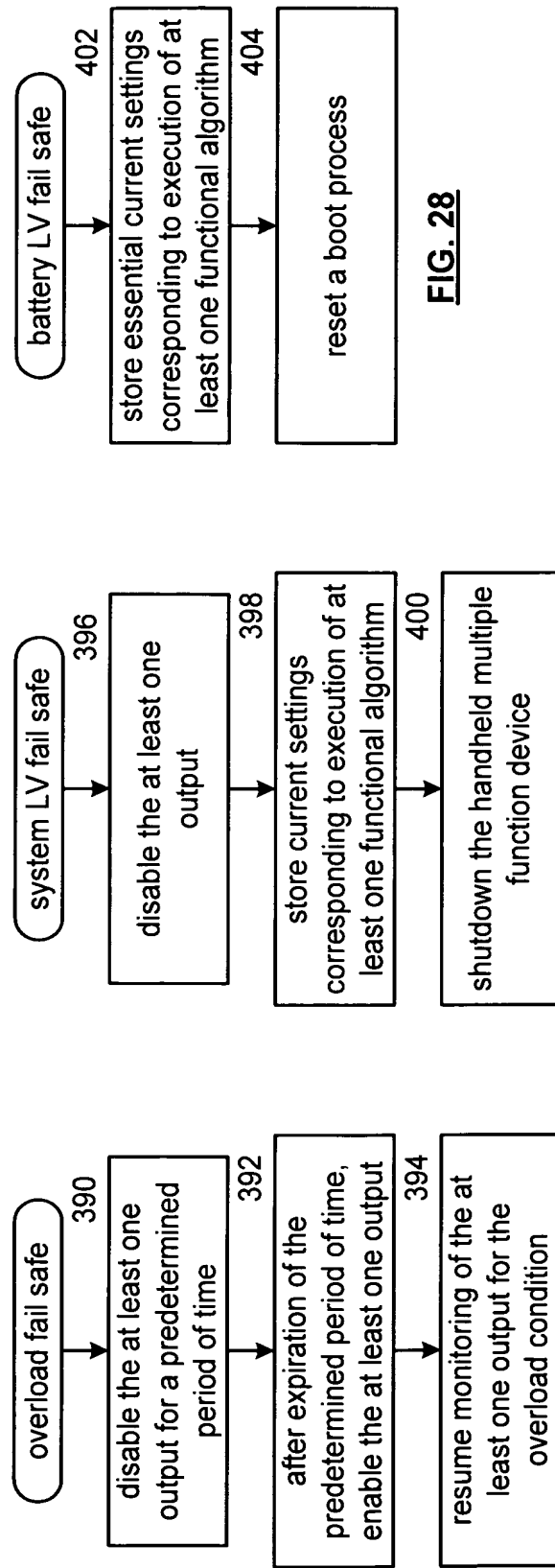
**FIG. 23**



**FIG. 24**



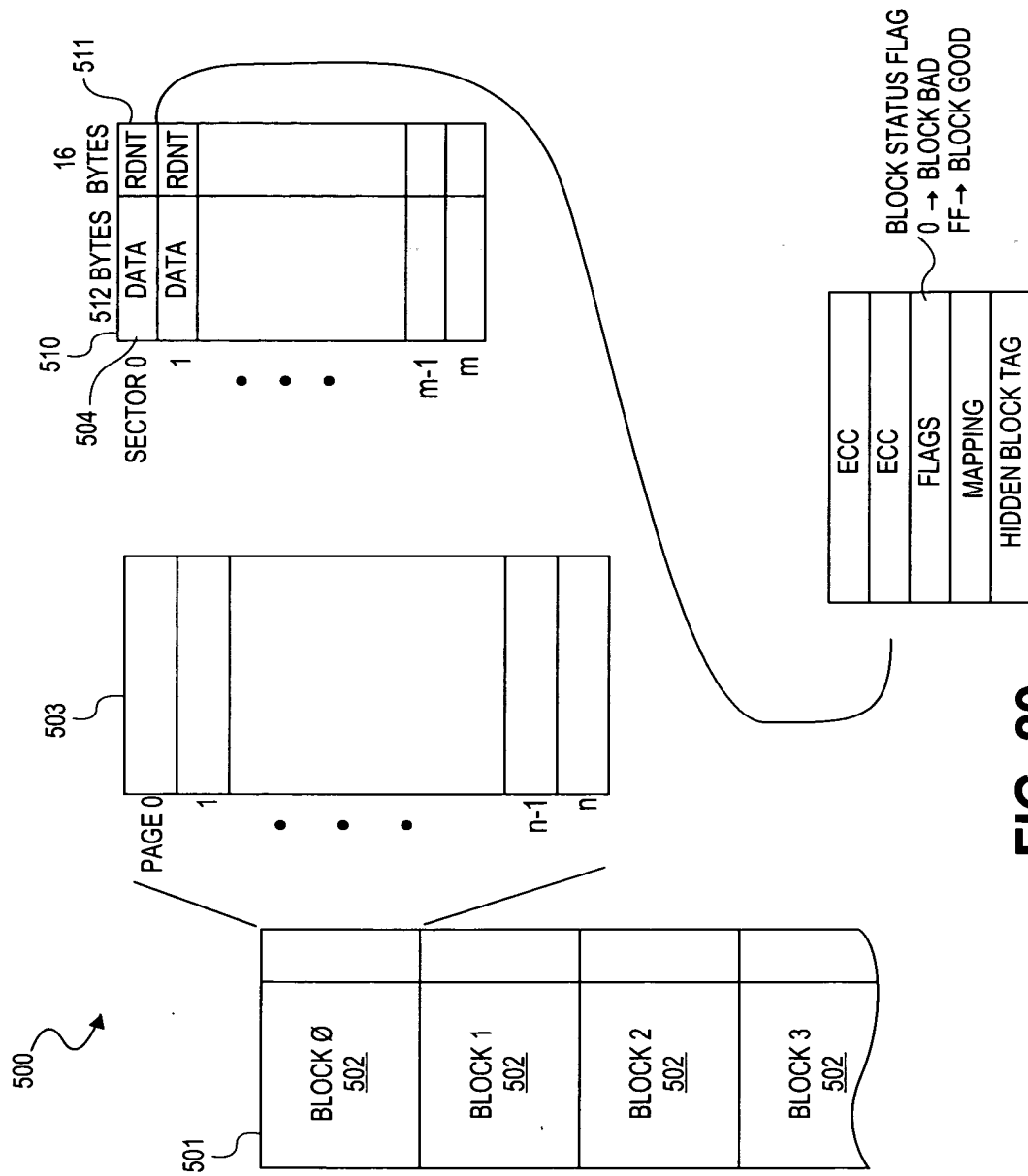
**FIG. 25**



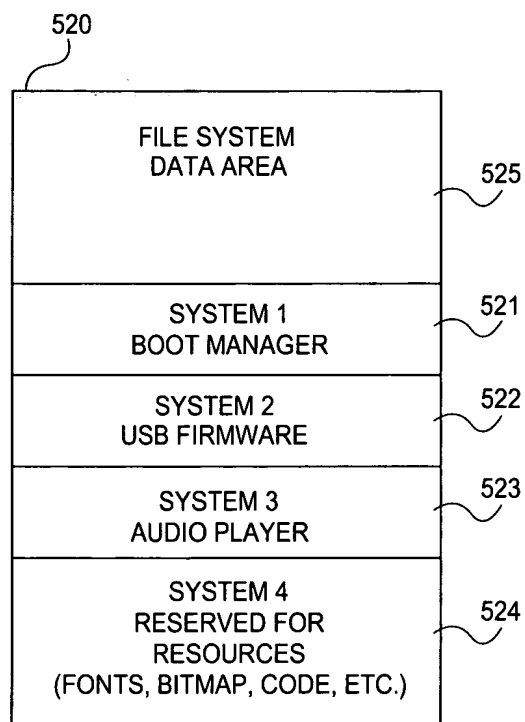
**FIG. 26**

**FIG. 27**

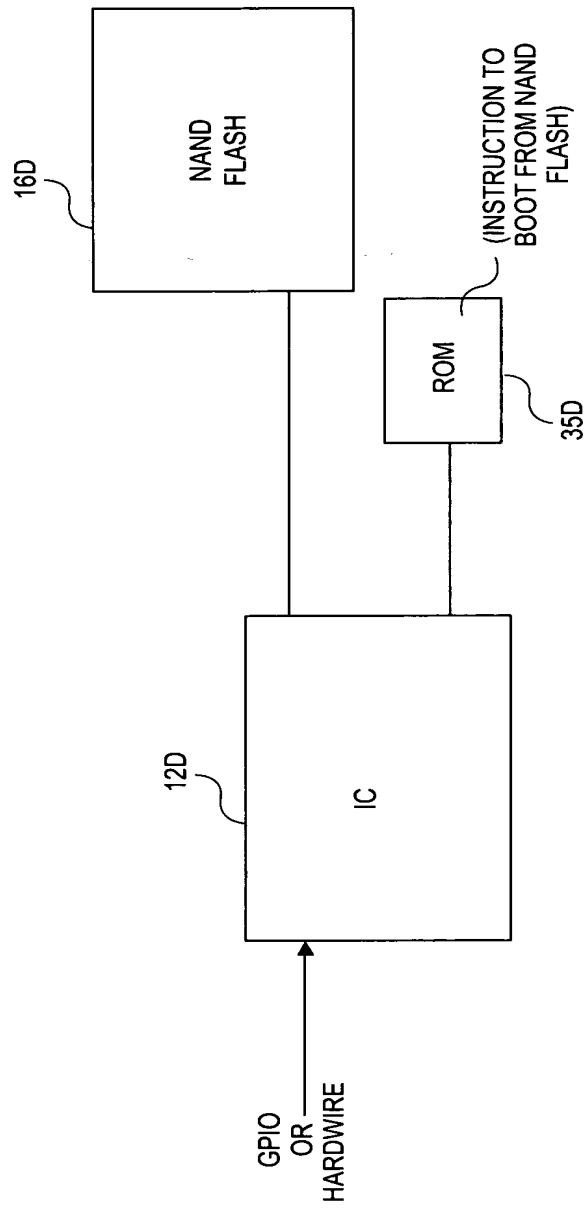
**FIG. 28**



**FIG. 29**

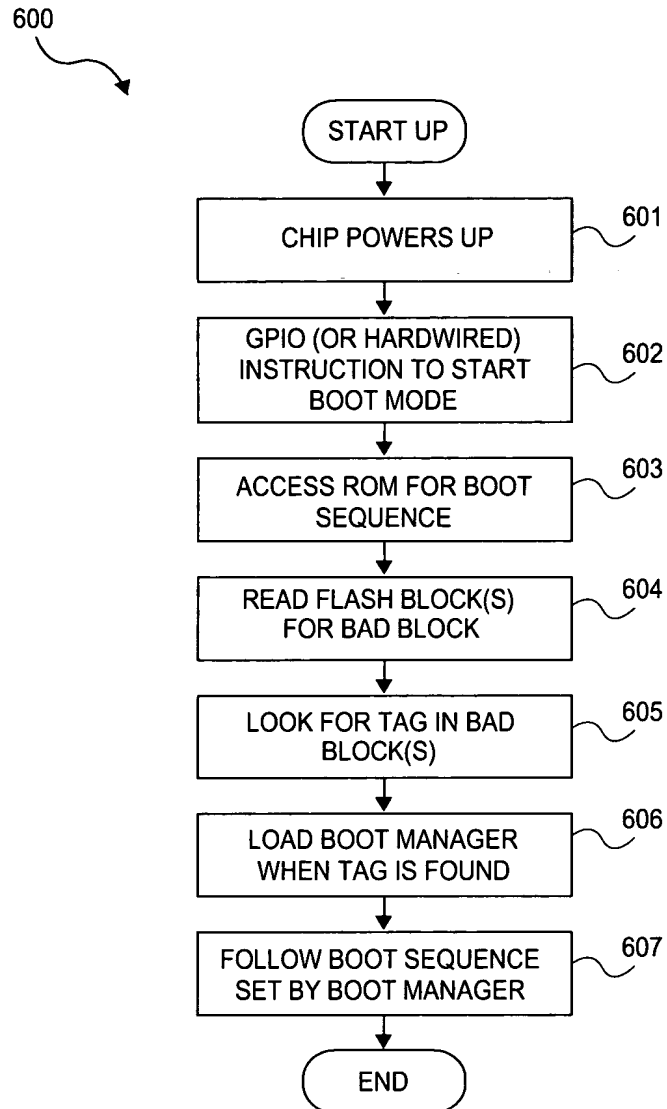


**FIG. 30**



**FIG. 31**





**FIG. 32**